

ON THE TREATMENT OF THE INDO-EUROPEAN  
CONSONANT GROUP -TL- IN SANSKRIT

It is well-known that Indo-European *l* is subject to a twofold treatment in Sanskrit. In some words it is converted to *r* while in others it remains as *l*, and instances where both treatments are found are not uncommon. These variations are found in all environments, including those in which IE -*l*- is the second member of a consonant group, e.g. *śukrá-* and *śuklá-*, *babhrú-* and *babhlusá-*. When however the first member of such a group is a dental there is a complication, since the groups -*tl-* and -*dl-* are not allowed in Sanskrit. What happens here in the case of the combination -*dl-* has been well established; in examples like *kṣudrá-* 'small' the -*l*- is converted to -*r-* after the usual Vedic style, but in *kṣulla-*, *kṣullaká-* the group with -*l*- preserved is assimilated to -*ll-*. This is the same change as occurs in compositional and external sandhi: *tal labhate*, *ulluptam*. Original -*l*- in this dental combination, can be deduced when such variation occurs. On the other hand if -*l*- had become -*r-* and that form only is attested, then its original cannot be detected.

The treatment -*ll-* is rare in the Veda, since *r* from *l* is much preferred in the Vedic language, but the above form *kṣullaká-* occurs in the Atharva- and Taittiriya- Samhitās, by which it is attested for the Vedic period. The change here is not Prakrit since to earlier form is preserved at this period. The group -*ll-* has already been established at the Vedic stage, and it is the representative in Sanskrit of IE -*dl-* in the earliest period.

Another example which has been noticed in this connection is *bhalla-* « auspicious », contrasting with the usual form *bhadrá-*, and pointing to an original IE suffix -*la* in this word. In Sanskrit this word is late and lexical, but in the NIA languages it is very widespread and much better represented than the alternative form *bhadrá-*. According to the rhetorician Vāmana this form was rustic (*grāmya-*), and it is an interesting example of a variant form, generally excluded by Sanskrit,

gaining the upper hand in the modern languages. Although generally recorded only in a late period, there is one instance where its currency at a much early date is attested. In Chāndogya Upaniṣad 4.1.2 the flamingo is addressed as *bhallākṣa* « auspicious-eyed » using the popular form of the word, and thus attesting the coexistence of the two forms of this adjective at the time of the composition of this work.

A further example is the word *challi* « bark » which Benfey derived from the root *chad-* « to cover ». This gives a suitable meaning, and no better suggestion has been produced since. The word is recorded only very late in Sanskrit, but it is well represented in Middle and particularly New Indo-Aryan: Pa. *challi* « bark, bast », Pkt. *challi* « skin, bark »; Hi. *chāl* « bark, skin, peel », *chālā* « skin, hide », etc., Turner, CDIAL, no. 5005. This is another example of a word which must have long existed in the popular language, whence its prevalence in NIA, which only gained admittance into Sanskrit at a very late date.

This derivation shows that this word can have no connection with the words with which M. Mayrhofer connected it in EWA. I, p. 405, namely Hi. *chīlnā* « to peel », *chōlnā* « to cut, peel, scrape », Be. *chol* « rind, bark ». These were all put together on the assumption that their irregular correspondences were to be accounted for by their non-Aryan origin, but since *challi* is clearly of Indo-Aryan derivation, as given above, this kind of theory cannot apply to it. As regards Hi. *chīlnā*, *chōlnā* and all the related words, Mayrhofer did not produce any actual etymologies, being content to suggest that the words were probably non-Indo-European. On the other hand DED pointed to similar words in Dravidian, namely for Hi. *chīlnā*, etc. no. 2120 Tu. *cilkuni*, etc., and for Hi. *chōlnā* n. 2336, Ta. *colī*, etc. The similarity between these Dravidian words meaning to « skin, peel » and the above IA words are certainly striking, and in the absence of an alternative, they would provide an acceptable etymology. Nevertheless I think there is a possibility of providing these IA words with an Indo-Aryan derivation, which is deserving of serious consideration.

There exists in rakrit a system of verbal derivation, by which an augment or infix *-il-*, which may be preceded by a vowel (e.g. *-ull-*) is added to the original root in such a way that the original root is often difficult to detect. The Prakrit verbs of this type were discussed, and for the first time properly interpreted, by L. A. Schwarzschild, in an article published in JAOS, 77, pp. 203-207, 1957 (« Notes on some Middle Indo-Aryan words in *-il-* »). Verbs of this kind which were quoted in the article were *sollai* « throw, propel » (*sū*), *ṇollai*, *ṇollei* « push » (*nud-*), *bhillia-* « broken » (*bhid-*), *vollai/bollai* « speaks » (*vac-* or *vad-*) *vollai* « to walk » (*vraj-*). In view of the existence of the type illustrated by these forms, it is obviously possible to derive Pkt. *chollai* « flays » in the same manner from the Sanskrit root *chā-/chi-*, which though usually given the general meaning « to cut », seems in actual usage to be particularly used in connection with flaying. The Skt present of this verb

is *chyāti*, which would give in Prakrit *chai*, a form so short that it might be considered to invite enlargement. Following the pattern of the above-mentioned Prakrit verbs we would get in the first place *ch-ulla-i*, and then with the expected contraction, the actual Prakrit form *chollai*, from which in due course Hi. *chōlnā*, etc. derive. The alternative NIA verb, Hi. *chūlnā*, etc. will be derived in the same way from the weak form of the Sanskrit verb, *chi-*, probably from a past participle \* *chilla-*, from which a denominative verb has been derived. In Prakrit *ñicchallai* « cut », the augment -*ll-*, in this case without supporting vowel, is added to the present base (Skt. *chyāti*) with short vowel.

In view of the many parallels the case for deriving Pkt. *chollai*, etc. from the Skt. root *chā-/chi-* in this way is very strong, so that the previously suggested Dravidian derivations become doubtful.

There is another word for « skin », hide' very widespread in the modern IA languages, but recorded only late and rarely in Sanskrit. This is the entry 3848 *khalla-* in R. L. Turner's *Comparative Dictionary of the Indo-Aryan Languages*, with derivatives all the modern languages: Hi. *khāl khālā* « skin, leather, bellows », Nep *khālo*, etc. The earlier forms are, Skt. *khalla-* « leather, leather garments » (lex.), « a leather water-bag » (lex.), Pa. *khallaka-* « leather for shoes » (VinP.), Pkt. *khal-laga-*, *khallaya-* « leather shoe » *khallā* « leather ». In his *Nepali Dictionary*, Turner proposed to derive these words from the Dhātupāṭha root *skhadate* « cut », which would have made it another example of -*dl-* > -*ll-* to be added to those under discussion. This suggestion in his later work he considered to be doubtful, rightly so, since the derivation of this word is quite different. The key to its derivation is provided by two lexical forms which have preserved the original conjunct -*lv-* which has elsewhere been assimilated to -*ll-*. These forms are *khalva-* n. (*Vaijayaṇṭī*) and *khalvā* f. (Hemacandra, *Uṇādi*), both rendered « *ḍṛti* », i.e. « leather waterbag, bellows ». These forms show that -*ll-* here cannot be from -*dl-*, but must represent original -*lv-*. As this word is recorded as early as the Pali Vinaya, there is a good chance that it should have an IE etymology, and now that the correct original form has been established, this is not difficult to find. The word belongs to the IE family of words collected together by J. Pokorny in IEW, pp. 293 ff. under the heading (s)*kel-* « schneiden », with examples such as Hitt. *iškallai-* « tear, tear off », Gk. *σκάλλω*, « stir up, hoe » *σκόλλω* « tear, strip », OIc. *skilja* « to split », Lith. *skeliū* « id. », and so forth. In Sanskrit the root has lost the mobile s-, but its original presence has resulted in the aspiration of the initial consonant, according to the principle established by R. Hiersche in his book *Untersuchungen zur Frage der Tenues Aspiratae im Indo-germanischen*, to whose examples this is to be added. Thus we get another example of a word occurring only very late in Sanskrit which nevertheless has a good IE etymology.

In Greek accounts of Alexanders campaigns in India, one of tribes figuring prominently are the Malloi. By an almost universal consensus

these Malloi have been identified with the Mālavas a tribe well-known from native sources. The obvious difficulty, that *Malloi* and *Mālava-* do not fit properly, and that one would expect *Malla-* to be the form rendered in Greek by *Malloi*, has been generally ignored. There is also another difficulty, that of position. The *Malloi* known to the Greeks were resident in the Punjab, whereas the *Mālavas* belonged to the desert areas of Rajasthan. Apart from other evidence, this is indicated by their name. The stem *mālava-* is a vr̥ddhied derivative of the usual kind from *\*malu-*, an alternative form of *maru-* « desert » with an *-l-* alternating with *-r-* as in many other cases. In such cases the *-l-* is usually original, so that in looking for an IE etymology forms having *-l-* should be primarily considered. For this reason forms like Goth. *malma* « sand », Swed. *malm* « sandy plain », OE *mealm(-stān)* « sandstone », are the most likely cognates.

Since the *Mālavas* are for this reason ruled out in identifying the *Malloi* of the Greeks, an alternative is to be sought. This is not difficult if we bear in mind the alternation noted above of *bhadra-* and *bhalla-*. By this parallel we can equate the *Malloi* with the *Madras*, whose geographical situation is exactly right. What the Greeks heard was not the classical form *Madra-*, but a variant in the popular speech *malla-*, with the same relation to *Madra-*, as that of *bhalla-* to *bhadrá-*. The original form of this name will have been *\*madla-*. In the case of the *Madras* the Vedic form of the name has prevailed in Sanskrit and Middle Indo-Aryan (Pa. Pkt. *madda-*), but this stem is also used of another tribe in NE India wellknown from Buddhist tradition, the *Mallas*. In this case the form with *-ll-* < *-dl-* only is known.

To find the etymology of *Malla-* therefore one must start from an original form *\*madla-*. In an article which will be published elsewhere I have dealt with the related roots *mā-*, *mād-* and *mad-* meaning « to meet, come together, associate », and of these the root form *mad-* can be seen in the adjectival form *madra-* < *\*madla-*. This provides a very suitable meaning since the members of tribal units meet together to discuss and manage their affairs. Both the *Madras* of the Punjab, and the *Mallas* of the North-East were classed as republican *gaṇas*, and such public meetings were customary in their case. Deriving the word from this root we can also see now its other meaning has arisen, namely that of « boxer, wrestler ». They are called *malla-* < *\*madla-*, because they meet in pugilistic contests, the primary meaning therefore being « competitor ».

This same change of *-dl-* to *-ll-* is assumed by J. Pokorny, IEW, p. 790 for Skt. *palla-* « granary » and *pallī* « a particular measure of grain ». By this means it can be connected with a Germanic family of words meaning « vessel, container », such as OHG *vazz*, OE *faet*, etc. Also connected are Lith. *puòdas*, Lett. *puòds* « pot ». This seems the best way of accounting for this word, although there are some complications. There is also a word *palya-* « a sack for corn » which makes it possible

that *palla-* may be a Middle Indian form with -*ll-* assimilated from -*ly-*. On the other hand it is equally possible that in *palya-* we have a hyper-sanskritic form based on the assumption that *palla-* was Prakritic. The genuineness of *palya-* might be held to be supported by the fact that Sheth's Prakrit dictionary gives a form *palia-* as equivalent to *palla-*, but in the Ardhamagadhī dictionary this *palia-* is registered only as the first part of the compound *paliovama-* « a huge period of time » which is Sanskritised as *palyopama-*. This is a mistake since the corresponding Sanskrit form, which occurs in *Kāśyapa-Saṃhitā* p. 44 is *palitopama-* corresponding to which Jaina Maharāṣṭrī has *palidovama-*. It is possible therefore that of the two forms of the word, *palla-* is the more original, and *palya-* artificially created. In any case the two should not be kept apart, as is done for instance by M. Mayrhofer.

Pokorny's reconstructed forms are *pēd-*, *pōd-* « to hold, contain »; *pēdo-* « vessel, container ». On the other hand E. Fraenkel in his etymological dictionary of Lithuanian separates the Lituian forms with -*ē-* (Lith. *pėdas* « sheaf », Lett. *pēda* « armull ») from the other words. It is done there ceases to be any foundation for the vocalism assumed by Pokorny. It is simpler to take the Baltic words as containing an original long vowel -*ō-* of which the -*a-* in Sanskrit and Germanic is the reduced grade. It would then be possible that this original *pōd-* might contain a root extension added to a more primitive *pō-* seen in Sanskrit *pātra-* « container, vessel ».

These are the examples where IE -*dl-* becomes -*ll-* in Sanskrit as opposed to the Vedic treatment -*dr-*. One would expect that IE -*tl-* would have developed in the same way, since in sandhi the combination of -*t* and *l-* produces -*ll-* just like that of *d-* and *l-*. So, beside the Vedic treatment -*tr-* one would expect to find examples of the alternative treatment -*ll-*. So far as I am aware no such examples have been pointed out, but this is not because they do not exist, but only because they have not been observed. Such examples are not rare, as will be demonstrated below.

1. The Sanskrit words *malla-*, *mallaka-*, *mallikā* having such meanings as « earthenware vessel, vessel made out of a coconut shell, lamp-stand » are rare in Sanskrit, their attestation being mainly confined to lexica und Buddhist texts. In Middle Indo-Aryan on the other hand they are quite common: Pa. *mallaka-* « bowl, vessel, cup, Pkt. *mallaga-*, *mal-laya-* an earthen bowl ». Words derived from these in the modern IA languages are given by Turner, CDIAL, no. 9909. Corresponding words are found widely in the SDravidian languages: Ta. *mallam* « cup, porringer, plate », etc. DED 3884. It has been suggested that these IA words have been derived from Dravidian, but it is obviously rather difficult in such a case to decide on which side the borrowing lies. One thing that speaks against Dravidian being the lender is the fact that the Tamil words given in DED are only date and lexical.

It is possible to find an IE etymology for these words on the assumption that the *-ll-* here represents IE *-tl-*. The words to be combined in the first place are Lat. *matula* (< *\*matla*) « vessel, pot; chamber pot » and *matella* « id. ». It is possible to go further than these straightforward equations between Latin and Sanskrit, by defining the structure of the root involved. In a fuller form this root appears as *ama-* in the Vedic word *āmatra-* « a large drinking vessel ». Here we have a disyllabic root (*amā*) in its full grade I with the reduced grade of the final long vowel of the base (*āma-tra-*). The full grade II of such bases involves the elision of the first vowel and the retention of the length of the final vowel (*plē-* « fill », etc. from, *pelē-*, etc.), and this process operates also in the case of disyllabic bases beginning with vowels, so that the full grade II of *amā*, if it were preserved as such, would be *\*mā-*. As I pointed out in *The Problem of Shwa in Sanskrit*, p. 15, these full grade II bases are subject to the process of ablaut, with the result that this *mā-* can have a reduced grade *ma-*. This is the form taken by the root in *\*matlā* (→ Lat. *matula*) and *matlo-* (→ Skt. *malla-*).

2. Sanskrit *culla-* « bleary-eyed; a bleary eye (MW) » could more precisely be rendered « having a dripping or watery eye; a dripping eye », since it does not have the other meanings associated with the English word *bleary*. The word is an adjective applied in the first place to the eye, a meaning which is still seen in the bahuvrīhi compound *cullākṣa-* « having watery or dripping eyes », then extended to apply to the person having such eyes. The word is not entirely confined to eyes, since a compound *cullamukha-* « having a dribbling mouth » is also recorded (Kṣemendra, *Deśopadeśa*, 8.36).

This adjective *culla-* can be explained as being from *\*cutla-*, formed with the suffix *-la* added to the root *cut-*, a variant of *cyut-* « to drip » with the Prakritic development of initial *cy-* to *c-* as seen in Pkt. *cuai*, and the further derivatives given in Turner, CDIAL, no. 4948, Hi. *cūnā*, etc. As such a word is likely to have a popular form this development is to be expected.

3. There is also a word *pilla-* having a meaning identical with that of *culla-*, and like it probably derived from an earlier form with *-tl-*, *\*pitla-*. Here no root in verbal use is available, but there are some Greek equations, to which I drew attention in Kratylos, XXI, p. 66 which may suggest that this was the case. The Greek words are *πῖλος* « having sore eyes », *πῖλλος* = *lippus*, *πῖλωσις* « soreness of the eyes », *πιλώσω* « to suffer from sore eyes ». In Frisk's *Griechisches Etymologisches Wörterbuch* these words have been put together with words meaning « down, soft feathers » which is quite inappropriate from the point of view of meaning. On the other hand the connection with Sanskrit *pilla-* is entirely suitable from this point of view.

I pointed out in the above mentioned note that the initial *π-* of the Greek word, could be compared with the which appears in *πρίσω*, *πτέρνῃ* etc., of which the explanation remains obscure. In view of this



suggestion about the derivation of Skt. *pilla-* from *\*pitla-* a more precise account may be attempted here. The Greek and Sanskrit forms are not precisely identical, since while the Sanskrit form goes back to *\*pitla-*, the Greek form is best explained out of *\*pitila-* with a slightly variant suffix. The loss of the first -i- in Greek can then be explained according to the principles expounded by O. Szemerényi in his book *Syncopé in Greek and Indo-European and the Nature of the Indo-European Accent*, i.e. *pitilo-* become *ptilo-*. The doubling in *πίλλος* will be expressive.

There is a third word having this meaning in Sanskrit, namely *cilla-*. There is no need to search for a separate etymology for this. It has obviously arisen as a hybrid form based on a mixing of *culla-* and *pilla-*.

4. Sanskrit *bhalla-* denoting a particular weapon occurs commonly in Sanskrit from the Mahābhārata onwards, and it is well represented in Middle and New Indo-Aryan, Turner CDIAL, no. 9409. The meaning given in Monier-Williams' dictionary is « a kind of arrow or missile with a point of a particular shape ». In the modern languages the meanings is predominantly « spear », but there is also the meaning « crescent-headed arrow ». If we assume that this *bhalla-* is from *\*bhatla-* an IE etymology becomes available by referring to the root *bhāt-*: *bhat-*, which should of course be *bhāt-*: *bhat-*, meaning « to strike, thrust ». Skt *bhalla-* < *\*bhatla-* contains the weak grade of this root followed by the suffix -la, and the meaning of the root fits exactly with that of the derivatives. There are some problems about this root, including the fact that the Latin representative *battuo* has to be a loanword on account of its phonology. Nevertheless it seems to be adequately established on the basis of the evidence provided by J. Pokorny in IEW, pp. 11-112, to which possibly the common Illyrian proper name *Bato* should be added. Sanskrit *bhalla-* < *\*bhatla-* extends the range of this root to the Indo-Iranian branch.

5. A satisfactory derivation for Sanskrit *phulla-* « in bloom, blossoming » has not so far been provided. Instead of the proposed connection with *phalati* « bursts », the solution of this problem is to be sought in quite a different direction. There is a root *sphuṭ-*, *sphuṭati* « to bloom, blossom » which is to be separated from *sphuṭ-* « to split », and of which the final -ṭ is a spontaneous cerebral. The reason for this conclusion was given in my article « Spontaneous cerebral in Sanskrit », BSOAS, 34, p. 550 (1971). It is that from this root there is derived a plant-name *āsphota-/āsphoṭa*, applied to several plants, *Bauhinea variegata*, etc., which are presumably so called on account of the abundance of their blossom. The preserved dental in the first of the alternative forms quoted shown that the original form of the root was *sphuṭ-* with dental t-. When the suffix -la is added to this *\*sphuṭ-* the result expected according to the rule we have established is *sphulla-*. The fact that we have not *\*sphulla-*, but *phulla-* is to be explained on the basis that *phulla-* is Prakritic. The adoption of this Prakritic form into Sanskrit

was probably largely due to the fact that in the frequent combination with the prefix *ud*, *utphulla*, the *-s-*, is elided by a regular rule of Sanskrit sandhi.

6. For *pallava*- « sprout, leaf-shoot, tender leaf », no satisfactory etymology has so far been proposed. A suggestion that it is for *pad-lava*- (*pad*- « foot » and *lava*- « small piece ») would have provided another example of the change of *-dl-* to *-ll-*, but it does not produce the required meaning. A connection with *phulla*- « blooming » is excluded by what has been said above about the derivation of *phulla*-. A better etymology is got if we take the *-ll-* as being from *-tl-* which would give an original *\*patlava*-. This form could then be connected with Gk πέταλον « leaf », but go back to a more complicated IE formation *\*pet-lewos*. If this is the derivation, then we should look again at Skt. *patra*- « leaf ». This word combines the meanings of « wing, feather » and « leaf » and is derived according to the first meaning from *pat*- « to fly ». As the word *parṇa*- also combines these two meanings this would seem to be in order. However the meaning of *patra*- is wider than that of *parṇa*-, being used of the blade of a sword, saw, etc. (*asipatra*-, *karapatra*-). It is also likely that the word *paṭṭa*- « plate, tablet, slab » is an irregular Prakritic development from *patra*-. In Greek the word πέταλον also combines the meanings of « leaf » and « metal plate ». The Greek word is derived from the root meaning « to spread out » (πετάννυμι). Words meaning objects which are flat and extensive are suitably derived from this root. For instance it provides a suitable etymology for Gk. πέτρα « stone » which will originally have meant « a flat stone », with the same development of meaning as seen in Hindi *patthar* « stone » from Skt. *prastara*-. In the same way it provides a suitable derivation for πέταλον « leaf », and also for Skt. *patra*- in all its meanings which in this case may well have been a homophone of *patra*- wing.

A Sanskrit lexicon (Kalpadrukosa, 144, 108) has preserved the name of a domestic utensil, *pallikā* « a butter knife or scoop ». As this is a broad and flat object it can be traced to *\*patlikā* containing the same root *pat*- « to extend ».

It was to be expected that IE *-tl-* in cases where it did not become *-tr-* with the Vedic change of *-l-* to *-r-*, would become *-ll-* in the same way as IE *-dl-* became *-ll-*, and from the above survey it has been shown that in no less than six instances this has been so. By recognising the reality of this development it has been possible to provide satisfactory analyses for a number of words which had previously resisted attempts to analyse them and provide them with a suitable etymology.